
Department of Educational Psychology

We develop educational leaders who create tomorrow's opportunities.

Our mission is to prepare competent and committed professionals who will make positive differences for children, young adults, and others in schools.

Educational Psychology EPS 640 Biological Bases of Development and Behavior Semester Year Syllabus

Course Day/Time:

Course Location:

Total Units of Course Credit: 3

Mode of Instruction:

Instructor's Name:

- **Office:**
- **Contact Information:**
- **Consultation hours:**

Course Pre-requisite(s), Co-requisite(s), Co-convened, and/or Cross-Listed Courses: (Admission to School Psychology (EdS) or Educational Psychology (PhD) program) and EPS 580.

Course Purpose: This course provides an overview of the neural mechanisms underlying human development and behavior. Core components of neuroscience are reviewed, including history, development, anatomy, physiology, pharmacology, research, assessment and treatment. Psychological constructs including language, learning and memory, emotion, spatial behavior, attention, and consciousness are reviewed. Brain injury and developmental, neurological, and psychiatric disorders are examined in conjunction with the role of the brain's plasticity.

Course Student Learning Outcomes: Expected outcomes of this course are that you will be able to (a) demonstrate an introductory graduate-level understanding of brain development, anatomy, organization, and function (b) integrate psychological concepts with physiology and neuroscience, (c) articulate the current ethical, theoretical, and philosophical issues and the most important questions in the field of neuroscience, (d) identify the physiological components of behavior, and (e) develop a toolbox of scholarly, community, and internet resources regarding neuropsychological education, assessment, and treatment.

Textbook and Required Materials

Required text: Kolb, B., & Wishaw, I. (2015). *Fundamentals of human neuropsychology* (7th ed.). New York, NY: Worth. (ISBN-10: 1-4292-8295-9; SBN-13:978-1-4292-8295-6)

Required materials:

- **Sheep brain dissection lab:** The instructor will order the lab materials. The cost to each student for the lab is \$50 in the form of a course fee. The fee covers dissection tools, a sheep brain, apron, goggles, gloves, sterilizing materials, instructions/worksheets, and an absorbent pad upon which to work.

Required Reading (Article are provided in BbLearn):

Feifer, S. G. & De Fina, P.A. (2005). *The neuropsychology of mathematics: Diagnosis and Intervention (Ch. 1 &*

- 2). School Neuropsychology Press.
- Feifer, S. G. & De Fina, P.A. (2013). *The neuropsychology of written language disorders: A framework for effective interventions* (Ch. 2). School Neuropsychology Press.
- Feifer, S. G. & De Fina, P.A. (2013). *The neuropsychology of written language disorders: A framework for effective interventions* (Ch. 6). School Neuropsychology Press.
- Feifer, S. G. & Della Toffalo, D. A. (2006). *Integrating RTI with cognitive neuropsychology: A scientific approach to reading* (Ch. 3, 4, & 5). School Neuropsychology Press.
- Geier, C. (2013). Adolescent cognitive control and reward processing: Implications for risk taking and substance use. *Hormones and Behavior*, 64(2), 333-342.
- Kesse-Guyot, E., Andreeva, V. A. ., Lassale, C., Hercberg, S., & Galan, P. (2014). Clustering of Midlife Lifestyle Behaviors and Subsequent Cognitive Function: A Longitudinal Study. *American Journal of Public Health*, 104(11), e170–e177. <https://doi.org/10.2105/AJPH.2014.302121>
- Morton, P. M., & Ferraro, K. F. (2018). Does early-life misfortune increase the likelihood of psychotropic medication use in later life? *Research on Aging*, 40(6), 558–579. <https://doi.org/10.1177/0164027517717045>
- Rappaport, N., Kulick, D., & Phelps, L. (2013). Psychotropic medications: An update for school psychologists. *Psychology In The Schools*, 50(6), 589-600. doi:10.1002/pits.21696
- Richards, P.M. & Kirk, J.W. (2010). Traumatic Brain Injury Across the Lifespan: A Neuropsychological Tutorial for Attorneys. *Psychol. Inj. and Law*, 3(3), 3-24. doi.org/10.1007/s12207-010-9065-0
- Taylor, H. G., Klein, N., Espy, K. A., Schluchter, M., Minich, N., Stilp, R., & Hack, M. (2018). Effects of extreme prematurity and kindergarten neuropsychological skills on early academic progress. *Neuropsychology*, 32(7), 809–821. <https://doi.org/10.1037/neu0000434.supp> (Supplemental)
- Wrzus, C., Wagner, G., Riediger, M., & Desteno, David. (2014). Feeling good when sleeping in? Day-to-day associations between sleep duration and affective well-being differ from youth to old age. *Emotion*, 14(3), 624-628.

Assessment of Student Learning Outcomes

Exams: There will be a midterm and a final exam worth 140 points each (for a total of 280 points). Exams give you an opportunity to demonstrate facts and concepts you have mastered. Exams will consist mostly of essay questions with some true/false, short answer, multiple-choice, and brain anatomy questions. Exams may cover information presented in class materials, class discussions, presentations, learning exercises, and reading assignments **whether they have been specifically discussed or not.**

Sheep Brain Dissection Lab: You will have the opportunity to participate in a sheep brain dissection lab during one of our class periods. The activity is worth 50 points. Your ability to identify key structures of the brain and to describe their function will be evaluated.

Alternate Activity: Any student, for any reason, may choose to replace the brain dissection lab with an alternate activity. Students must inform the instructor of their intention to replace this course requirement at least one week prior to the start of the dissection lab. As an alternative, student may take the pre- and post-tests for the lab. They will attend class during lab time, either in the same room or a nearby room. They will watch the lab videos and complete an online lab activity assigned by the instructor that requires anatomy learning.

Portfolio Project: You will have the opportunity to demonstrate your scholarship and creativity as you develop resources that will be useful in your intended profession. The overall learning objectives for the portfolio are that you will be able to (1) use the knowledge from this course to inform your psychological/counseling practice; (b) teach those you serve how their brains work and how understanding of brain function can help them to successfully understand and modify their behaviors as they move toward academic, health, interpersonal, and other life goals; (c) understand and communicate scientific terminology when working with other professionals on integrated health service psychology teams.

You will develop educational materials to demonstrate issues specific to brain function. Development of materials such as a models, illustrations, or figures of different aspects of the brain will be assigned. Materials and design are up to you as long as the materials (or a picture/or video) may somehow be submitted electronically. Creativity is encouraged!

You will be asked to give thought to potential consumers of your work such as students, clients, parents, siblings, teachers, and other professionals so that strategies and resources (e.g. websites, videos, books, articles, and community programs) may be applicable to those you will serve. With the possible exception of the research paper

and presentation, the resource materials should be useful for clients/consumers with whom you might be working. Materials should be at the appropriate level (e.g. materials for children should be designed for their reading level and be visually engaging).

The portfolio will be constructed as separate assignments throughout the course, including term paper and the presentation. As you progress through the course, you will be submitting the following nine (9) items for your electronic portfolio. Please keep a copy of each assignments in a folder on your own computer (take pictures of any physical models, of course) for reference once the course is over. Please remember to cite the source of any images and cite and reference the text of materials. If you use images from the internet in your portfolio, please use only non-copyrighted images and cite with a caption beneath the image, for example:

Image reference (author, title, and date):

Freeman, L. (2011). *Psychological time bomb*. [Online image]. Retrieved on July 27, 2012 from: <http://juggleclass.com/art>.

Image reference (title and date available but no author)

Psychological time bomb [Online image]. (2011). Retrieved July 27, 2012 from <http://juggleclass.com/art>.

Image reference (No Author, No Title, No Date):

[Untitled illustration of woman with bomb for a brain]. Retrieved July 27, 2012 from <http://juggleclass.com/art>.

- a. Portfolio Assignment 1—Dictionary of Terms: You will develop a running list of terms whose meanings are unfamiliar to you, along with their definitions (usually 5-10 per week but more if you want). The list will be due at the end of the term. (15 points)
- b. Portfolio Assignment 2—Brain Model: You will have the opportunity to develop a model of the brain and its lobes, accompanied by a written description of the lobes' primary functions that you might use in your intended practice. Please include a paragraph for each lobe, describing its primary functions either separately or as part of the depiction. You must include a description of the order in which the brain develops. (15 points)
- c. Portfolio Assignment 3—Medication Table: You will develop a table of mood disorders commonly diagnosed with children or adults that lists symptoms, most common medications and dosages, and common medication side effects. (15 points)
- d. Portfolio Assignment 4—Depiction of Brain Image Important to Your Research Topic: Please provide an image of the parts of the brain that are central to your research topic and specifically describe how those parts of the brain are implicated in your research topic and identify how that part of the brain and its functions develop *from fetus to adulthood*. You will include this image as a figure in your research paper (15 points)
- e. Portfolio Assignment 5--A Community Referral/Resource Specific to Development and Brain Function: You and your classmates will individually submit an entry that you will combine in an online format (e.g. Google docs) resource guide to be distributed back to all students in the class. **Please see the template in the appendix section of the syllabus.** You must discuss (in person or via email) the referral/resource with me before doing the assignment. Because this resource will read like a description of services and/or information available in the community (local, web, national, or global community) unique contributions will be most useful (no duplication of resources across students). Preferably, keep information to one page or two pages. It's just a summary for quick reference in the future. The entire resource guide with all entries will be included in your portfolio which will benefit you in practice. **The resource should address brain-related aspects and employ experts trained in brain research or peer-reviewed brain research from journals in their approach.** You will need to be careful because there are many agencies and institutions that purport to be brain-related but actually use concepts irresponsibly by choosing isolated facets of the research and misapplying them. (30 pts)
- f. Portfolio Assignment 6—Brain-Related Tool for Client/Student/Parent: Please submit one well-researched, best practice tool that you could use to assist students, clients, family members, or other consumers in dealing with the brain and development issue you are researching for your paper. This could be anything useful: a pros/cons handout regarding medication for the issue, a strategy for an individual to cope with a specific symptom (or help a family member to adapt) such as an assistive memory device or an app. (20 points)
- g. Portfolio Assignment 7—Annotated Bibliography: Please submit an annotated bibliography of three books and/or articles that would be useful to provide to a client, family member, or other consumer (e.g. teacher) specific to your research topic. Both biological and developmental aspects should be integrated into at least one of your book choices. (20 pts)

- h. Portfolio Assignment 8—Term Paper: You will have the opportunity to research and report on a brain-related disorder that you might encounter in your intended practice. Please include (a) a description of the disorder, (b) its etiology, (c) symptoms—include cognitive impact, (d) diagnosis, (e) impact on developmental functioning from birth to death, (f) evidence-based treatment, and (g) differential effects of culture, race, ethnicity, socioeconomic status, sexual orientation, and gender in terms of prevalence and treatment (note any health disparities). Paper guidelines and a scoring rubric are included in the appendix section at the end of this syllabus. (100 points)
- i. The research paper must be at least 10 – 12 pages in length (not including abstract and references) and utilize at least *six* references from peer reviewed journals. **Papers must follow the most current American Psychological Association format.** You will be given the opportunity early in the term to discuss your paper topic with me (in person or via email) prior to preparation of the paper.
- i. Portfolio Assignment 9—Consultant Presentation: You will have the opportunity to present your term paper in a condensed, easy-to-understand, in-service format to the class using Prezi, PowerPoint, or other software. The presentation should be understandable by members of a professional team (e.g. schools/parents or hospitals/nurses, physicians or community mental health teams). This is a wonderful opportunity to act in the role of consultant as you will do in the future with other professionals, as a member of a health service psychology integrated team. The presentation will be 3 minutes long. The grading rubric is in the appendix section at the end of this syllabus. (50 points)

Grading System

<p>The final grade for this course will be based on the following:</p> <p>--Midterm and Final Exams (140 points each)—280 points</p> <p>--Portfolio Projects— 280 points total</p> <p>--Sheep Brain Dissection Lab- 50 points</p>	<p>Final grades will be determined by the following point breakdown:</p> <table> <tr> <td>A</td><td>549-610 points (90% - 100%)</td></tr> <tr> <td>B</td><td>488-548 points (80% - 89%)</td></tr> <tr> <td>C</td><td>427-487 points (70% - 79%)</td></tr> <tr> <td>D</td><td>366-426 points (60% - 69%)</td></tr> <tr> <td>F</td><td>365 and below (< 60%)</td></tr> </table>	A	549-610 points (90% - 100%)	B	488-548 points (80% - 89%)	C	427-487 points (70% - 79%)	D	366-426 points (60% - 69%)	F	365 and below (< 60%)
A	549-610 points (90% - 100%)										
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C	427-487 points (70% - 79%)										
D	366-426 points (60% - 69%)										
F	365 and below (< 60%)										

EPS 640 Biological Bases of Behavior Course Outline

Module #	TOPIC	READINGS	ASSIGNMENT
1	Introduction to the brain/behavior, development, and the role of neuropsychology, including the origins of the human brain and epigenetics	Kolb & Whishaw—Ch. 1, 2	<ul style="list-style-type: none"> Begin Portfolio Assignment 1: Dictionary of Terms (which continues throughout the semester)
2	Organization of the Nervous System	Kolb & Whishaw—Ch. 3	<ul style="list-style-type: none"> Submit paper ideas for feedback via email or in person
3	Neuronal Structure and Communication	Kolb & Whishaw—Ch. 4,5 <i>Geier (2013)</i>	<ul style="list-style-type: none"> Portfolio Assignment 2: Brain Model
4	Imaging and The Effects of Drugs & Hormones on Neuronal Functioning	Kolb & Whishaw—Ch. 6,7 <i>Rappaport et al. (2013)</i> <i>Morton & Ferraro (2018)</i>	<ul style="list-style-type: none"> Portfolio Assignment 3: Medication Table
5	Brain Development, Plasticity, & Neurodevelopmental Disorders- Find a better source	Kolb & Whishaw—Ch. 23, 24 <i>Taylor et al (2018)</i>	<ul style="list-style-type: none"> Portfolio Assignment 4: Depiction of specific parts of the brain that are important to your research topic _____ _____
6	The Aging Brain Cerebral Asymmetry	Kolb & Whishaw—Ch. 11, 12 <i>Kesse-Guyot (2014)</i>	<ul style="list-style-type: none"> Portfolio Assignment 8: Research paper due on day of presentation Portfolio Assignment 9: Class Presentations Begin _____ _____ _____
7	Sensory Motor Systems & Spatial BehaviorDevelopment and Disorders	Kolb & Whishaw—Ch. 8, 9,21	<ul style="list-style-type: none"> Submit community referral ideas for feedback _____ _____ _____
	Midterm Exam		<ul style="list-style-type: none"> MIDTERM EXAM (Modules 1-7)
8	Occipital and Parietal Lobes: Structure, Disorders, and Symptoms	Kolb & Whishaw—Ch.13, 14	<ul style="list-style-type: none"> _____ _____ _____
	SPRING BREAK	SPRING BREAK	
9	Temporal and Frontal Lobes: Structure, Disorders, and Symptoms	Kolb & Whishaw—Ch. 15,16 <i>de Cock (2017)</i>	<ul style="list-style-type: none"> Portfolio Assignment 5: Submit community resource guide entry

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10	<p>Attention/Consciousness: Development, Disorders, and Symptoms</p> <p>Language, Emotion: Development, Disorders, and Symptoms</p>	<p>Kolb & Whishaw—Ch. 22 and 19, 20 <i>Wruz et al (2014)</i></p>	<p>• Portfolio Assignment 6: Strategy</p> <hr/> <hr/> <hr/>
11	<p>Learning/Memory: Development, Disorders, and Symptoms</p>	<p>Kolb & Whishaw—Ch.18 <i>Feifer et al. articles (2005, 2006, 2013-Ch 2 only)</i></p>	<p>• Portfolio Assignment 7: Annotated bibliography</p> <hr/> <hr/> <hr/>
12	<p>Brain Injury and Neurological Disorders Across the Lifespan</p>	<p>Kolb & Whishaw—Ch. 25, 26 <i>Richards & Kirk (2010)</i></p>	<hr/> <hr/> <hr/>
13	<p>SHEEP BRAIN DISSECTION LAB</p>	<p>Wear old clothes and closed shoes</p>	
14	<p>Psychiatric Disorders Neuropsychological Assessment</p>	<p>Kolb & Whishaw—Ch. 27, 28 <i>Feifer (2013, Ch. 6)</i></p>	<p>• Portfolio Assignment 9: All Class Presentations Completed</p> <hr/> <hr/> <hr/> <p>• Portfolio Assignment 1: Dictionary of Terms due</p>
	<p>Final Exam</p>		<p>FINAL EXAM (Modules 8-15)</p>

Community Referral Template

EPS 640 Biological Bases of Behavior

Should include:

- ☐ Resource contact information (name, address, website, phone numbers)
- ☐ Description of referral/resource programs, services, and/or information provided (as applicable)
- ☐ Developmental populations served; specific developmental issues treated
- ☐ Resource history, purpose, mission, philosophy, founders
- ☐ Any credentials held (e.g. licensure or accreditation)
- ☐ Types of consumers served by the referral/resource
 - ☐ Who might you refer to this resource?
 - ☐ How is a referral made (e.g. primary care physician, school, hospital), website?
- ☐ Average duration of treatment or service (if a service agency)
- ☐ Funding source
 - ☐ Is private insurance, Medicare, Medicaid, AHCCCS accepted?
 - ☐ Other sources of funding
- ☐ Multicultural services (languages spoken, diverse perspectives represented, evidence that the resource provides services that reflect the richness of U.S. and/or global cultures)
- ☐ Any other information you think your peers might find useful

EPS 640 BIOLOGICAL BASES OF BEHAVIOR

TERM PAPER GUIDELINES

The instructor must approve all topics by the deadline noted on the course calendar.

The required term paper must:

- ❑ Be a research-based exploration of a brain-related disorder that you might encounter in your intended practice.
- ❑ Include a description of the disorder, its etiology, symptoms, diagnosis, impact on development, brain functioning and behavior, and treatment, along with support and criticism for the treatment method.
- ❑ Include at least six (6) references from peer reviewed medical, psychological, or mental health related journals, in addition to books (books are optional) and or peer-reviewed, government websites (e.g. NIH).
- ❑ Conform to the most recent APA Publication Manual in every way. Including (but not limited to):
 - Double-spacing
 - 10 – 12 pages of text – keep to this strictly as points will be taken off for less than 10 or more than 12 pages. Being able to adhere to time and space limitations is essential to professional success.
 - Include title and abstract pages, running head, page numbering, and references in APA style (in addition to 10 –12 pages of text).
- ❑ Include headings to introduce different sections of the paper, consistent with examples in the APA Publication Manual
- ❑ Flow smoothly from one paragraph and section to the next
- ❑ Exhibit graduate-level grammar and spelling skills
- ❑ All students must submit the research paper to SafeAssign within the BbLearn course shell

Name: _____

APA-STYLE PAPER SCORING ELEMENTS

Writing style overall: _____ /15

Clear/Precise _____

Smooth _____

Orderly _____

At least six references from peer-reviewed journals _____ /15

Includes Impact of Disorder from Birth to Death _____ /15

(Description of the disorder, etiology, symptoms, diagnosis, impact on lifespan development, cognitive functioning and behavior)

Includes Developmentally Effective Treatment Methods _____ /15

Describes Health Disparities: _____ /6

(Differential effects of culture, race, ethnicity, socioeconomic status, sexual orientation, and gender in terms of prevalence and treatment).

Conclusion section _____ /4

Spelling _____ /4

Grammar _____ /4

Title Page _____ /1

Abstract _____ /4

First Page of Text _____ /1

Running Head Throughout _____ /1

Page Numbering _____ /1

Headings _____ /3

Citations in text _____ /3

References _____ /3

Quotations _____ /3

Maintained specified page limit _____ /2

Total _____ /100

Presentation Evaluation

Presentation Title: _____

Presenter: _____ **Date:** _____

Overall Quality	Developing		Proficient	Exemplary	
1. The presenter identified the intended audience (future health service team) and why topic is important to that audience.	1	2	3	4	5
2. Information on each slide was accurate and sources cited.	1	2	3	4	5
3. Content & instruction level were appropriate for professionals on the identified health service team.	1	2	3	4	5
4. Visual aids, handouts, and oral presentations clarified content.	1	2	3	4	5

Specific Features of Presentation	Developing		Proficient	Exemplary	
5. Described the disorder, diagnosis, and symptoms.	1	2	3	4	5
6. Identified etiology and impact on development.	1	2	3	4	5
7. Described the relationship between brain function & behavior in understandable terms.	1	2	3	4	5
8. Answered questions effectively.	1	2	3	4	5

Learning and Applicability	Developing		Proficient	Exemplary	
9. Examples were provided about how this might affect various team professions.	1	2	3	4	5
10. Differential effects of culture, race, ethnicity, socioeconomic status, and gender in terms of prevalence and treatment (note any disparities) were explored.	1	2	3	4	5

Narrative
14. Aspects that went well or were particularly interesting:
15. Aspects that might be improved:

TOTAL POINTS: _____/50

Course Policies

1. Regular attendance is expected. More than one absence will result in a 10% reduction in overall course points. Three tardies or early exits will count as one absence.
2. If you must be absent, please arrange for another student to pick up handouts for you. You are responsible for getting class notes, announcements, etc., from another student.
3. If you are unable to take the exam or turn in an assignment at the regularly scheduled time, the instructor should be contacted prior to the exam or assignment due date.
4. All assignments done outside of the classroom must be typed. Writing errors, such as spelling, punctuation, grammatical errors, etc., will be taken into consideration and will lower your grade. All assignments should be PROFESSIONAL in appearance.
5. Students are permitted and encouraged to proofread each other's assignments but may not collaborate unless specifically listed in the assignment instructions.
6. Make sure you have a copy of every assignment before you submit it to the instructor.
7. Assignments should be submitted on the due date to receive full credit. Any assignment may be turned in earlier than the due date.
8. All assignments must be completed in full before a grade will be assigned. Students may not choose to eliminate assignments or parts of assignments.
9. In the event of an unusual final point distribution, the final point requirements may be lowered. This will be solely at the instructor's discretion.
10. Assignments submitted as a requirement for another class should not be submitted for this class. All assignments should be the original work of the student completed for this class.
11. NAU regards acts of academic dishonesty as very serious offenses. Please see the NAU Syllabus Policy Statements regarding Academic Integrity below.
12. All faculty and students who do not use their NAU email accounts must forward email from their NAU account to their primary email account in order to receive important information and updates.

COVID-19 REQUIREMENTS AND INFORMATION

Additional information about the University's response to COVID-19 is available from the **Jacks are Back!** web page located at <https://nau.edu/jacks-are-back>.

SYLLABUS POLICY STATEMENTS ACADEMIC INTEGRITY

NAU expects every student to firmly adhere to a strong ethical code of academic integrity in all their scholarly pursuits. The primary attributes of academic integrity are honesty, trustworthiness, fairness, and responsibility. As a student, you are expected to submit original work while giving proper credit to other people's ideas or contributions. Acting with academic integrity means completing your assignments independently while truthfully acknowledging all sources of information, or collaboration with others when appropriate. When you submit your work, you are implicitly declaring that the work is your own. Academic integrity is expected not only during formal coursework, but in all your relationships or interactions that are connected to the educational enterprise. All forms of academic deceit such as plagiarism, cheating, collusion, falsification or fabrication of results or records, permitting your work to be submitted by another, or inappropriately recycling your own work from one class to another, constitute academic misconduct that may result in serious disciplinary consequences. All students and faculty members are responsible for reporting suspected instances of academic misconduct. All students are encouraged to complete NAU's online academic integrity workshop available in the E-Learning Center and should review the full *Academic Integrity* policy available at <https://policy.nau.edu/policy/policy.aspx?num=100601>.

COURSE TIME COMMITMENT

Pursuant to Arizona Board of Regents guidance (ABOR Policy 2-224, *Academic Credit*), each unit of credit requires a minimum of 45 hours of work by students, including but not limited to, class time, preparation, homework, and studying. For example, for a 3-credit course a student should expect to work at least 8.5 hours each week in a 16-week session and a minimum of 33 hours per week for a 3-credit course in a 4-week session.

DISRUPTIVE BEHAVIOR

Membership in NAU's academic community entails a special obligation to maintain class environments that are conducive to learning, whether instruction is taking place in the classroom, a laboratory or clinical setting, during course-related fieldwork, or online. Students have the obligation to engage in the educational process in a manner that does not interfere with normal class activities or violate the rights of others. Instructors have the authority and responsibility to address disruptive behavior that interferes with student learning, which can include the involuntary withdrawal of a student from a course with a grade of "W". For additional information, see NAU's *Disruptive Behavior in an Instructional Setting* policy at <https://nau.edu/university-policy-library/disruptive-behavior>.

NONDISCRIMINATION AND ANTI-HARASSMENT

NAU prohibits discrimination and harassment based on sex, gender, gender identity, race, color, age, national origin, religion, sexual orientation, disability, or veteran status. Due to potentially unethical consequences, certain consensual amorous or sexual relationships between faculty and students are also prohibited as set forth in the *Consensual Romantic and Sexual Relationships* policy. The Equity and Access Office (EAO) responds to complaints regarding discrimination and harassment that fall under NAU's *Nondiscrimination and Anti-Harassment* policy. EAO also assists with religious accommodations. For additional information about nondiscrimination or anti-harassment or to file a complaint, contact EAO located in Old Main (building 10), Room 113, PO Box 4083, Flagstaff, AZ 86011, or by phone at 928-523-3312 (TTY: 928-523-1006), fax at 928-523-9977, email at equityandaccess@nau.edu, or visit the EAO website at <https://nau.edu/equity-and-access>.

TITLE IX

Title IX is the primary federal law that prohibits discrimination on the basis of sex or gender in educational programs or activities. Sex discrimination for this purpose includes sexual harassment, sexual assault or relationship violence, and stalking (including cyber-stalking). Title IX requires that universities appoint a "Title IX Coordinator" to monitor the

institution's compliance with this important civil rights law. NAU's Title IX Coordinator is Elyce C. Morris. The Title IX Coordinator is available to meet with any student to discuss any Title IX issue or concern. You may contact the Title IX Coordinator by phone at 928-523-3515, by fax at 928-523-0640, or by email at elyce.morris@nau.edu. In furtherance of its Title IX obligations, NAU will promptly investigate and equitably resolve all reports of sex or gender-based discrimination, harassment, or sexual misconduct and will eliminate any hostile environment as defined by law. Additional important information about Title IX and related student resources, including how to request immediate help or confidential support following an act of sexual violence, is available at <https://in.nau.edu/title-ix>.

ACCESSIBILITY

Professional disability specialists are available at Disability Resources to facilitate a range of academic support services and accommodations for students with disabilities. If you have a documented disability, you can request assistance by contacting Disability Resources at 928-523-8773 (voice), 928-523-6906 (TTY), 928-523-8747 (fax), or dr@nau.edu (e-mail). Once eligibility has been determined, students register with Disability Resources every semester to activate their approved accommodations. Although a student may request an accommodation at any time, it is best to initiate the application process at least four weeks before a student wishes to receive an accommodation. Students may begin the accommodation process by submitting a self-identification form online at <https://nau.edu/disability-resources/student-eligibility-process> or by contacting Disability Resources. The Director of Disability Resources, Jamie Axelrod, serves as NAU's Americans with Disabilities Act Coordinator and Section 504 Compliance Officer. He can be reached at jamie.axelrod@nau.edu.

RESPONSIBLE CONDUCT OF RESEARCH

Students who engage in research at NAU must receive appropriate Responsible Conduct of Research (RCR) training. This instruction is designed to help ensure proper awareness and application of well-established professional norms and ethical principles related to the performance of all scientific research activities. More information regarding RCR training is available at <https://nau.edu/research/compliance/research-integrity>.

MISCONDUCT IN RESEARCH

As noted, NAU expects every student to firmly adhere to a strong code of academic integrity in all their scholarly pursuits. This includes avoiding fabrication, falsification, or plagiarism when conducting research or reporting research results. Engaging in research misconduct may result in serious disciplinary consequences. Students must also report any suspected or actual instances of research misconduct of which they become aware. Allegations of research misconduct should be reported to your instructor or the University's Research Integrity Officer, Dr. David Faguy, who can be reached at david.faguy@nau.edu or 928-523-6117. More information about misconduct in research is available at <https://nau.edu/university-policy-library/misconduct-in-research>.

SENSITIVE COURSE MATERIALS

University education aims to expand student understanding and awareness. Thus, it necessarily involves engagement with a wide range of information, ideas, and creative representations. In their college studies, students can expect to encounter and to critically appraise materials that may differ from and perhaps challenge familiar understandings, ideas, and beliefs. Students are encouraged to discuss these matters with faculty.

Last revised August 1, 2021